MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2021/2022

DMG5024 – MANAGEMENT ACCOUNTING 2

(All Sections/Groups)

22 NOVEMBER 2021
9.00 a.m – 12.00 p.m
(3 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 7 pages with 5 Questions only.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

PART A

K Bersih Sdn. Bhd. manufactures 800,000 bottles of hand sanitisers every month and sells them in both the local and international market. The selling price for a bottle of hand sanitiser is RM15. Currently the company has an excess capacity in their manufacturing due to their recent plant expansion and the purchase of a new machine at the cost of RM350,000 in March 2021.

The company's accountant has provided the following information for the month of October 2021. Total manufacturing cost for the month is RM6,400,000.

	Cost
Direct material	37.5%
Direct labour	25.0%
Variable manufacturing overhead	12.5%
Fixed manufacturing overhead	?
Total manufacturing cost	**100%**

Teguh Berhad approached K Bersih Sdn. Bhd. and offered to make the hand sanitisers for them at a lower price of RM7 per bottle. Mr. Shamsul, K Bersih Sdn. Bhd.'s manager, is very eager to accept this offer as the price is lower than their manufacturing cost, thus increasing the company's profit. However, the company's accountant notes that 85% of the fixed manufacturing overhead must be absorbed by other products if the company decides to purchase the hand sanitisers from Teguh Berhad.

Mr. Shamsul also noted that if they purchase the hand sanitisers from Teguh Berhad, the company can now use the released capacity to produce antibacterial hand wash. Due to the additional process required in making the hand wash, only 100,000 packets of antibacterial hand wash can be produced each month. Each packet of antibacterial hand wash costs RM3 and can be sold at RM5 each.

Required

(a) Should K Bersih Sdn. Bhd. make or buy the hand sanitisers? (11.5 marks)

(b) Assume that instead of producing the antibacterial hand wash, the company decides to produce 100,000 packets of antibacterial body wash at a cost of RM4 per packet and a selling price of RM10 per packet. Will your decision change? *(Hint: Show your calculation)* (5.5 mark)

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PART B

Sabrina runs a candy making factory in Kluang. Recently, she encountered three scenarios as below:

Scenario 1
Kumar has approached Sabrina to purchase 10,000 packets of candies for his home business at 80% of her normal selling price. The acceptance of this order will not affect her normal sales as she has existing capacity to fulfil this order.

Scenario 2
One of Sabrina's vans keeps breaking down recently and Sabrina must spend another RM60,000 to repair the van if she wants to keep it. She is also looking into the possibility of getting a new van.

Scenario 3
The coconut candy has not been generating any net income for the past 6 months. Thus, the finance manager is working on determining how much fixed cost can be saved if the company stops this product line.

Required

Determine the type of decision required by Sabrina on each of the scenario above.
(3 marks)

(Total: 20 marks)

QUESTION 2

Escape Lodge is a campsite that provides various types of camping facilities from luxurious hotel rooms with internet access and satellite services, to dining services in various cafés and restaurants around the campsite. Their famous activities in the campsite are water sports and cave diving. For the year 2021, the management has budgeted 450,000 hours of labour time and an estimated total material bill of RM800,000 for the water sports and cave diving activities. The budgeted cost data for the year is as stated below:

Water sports and cave diving activities	**Time charges (RM)**	**Material charges (RM)**
Employees' wages and benefits	2,385,000	-
Manager's salary and benefits	-	124,800
Admin's salary and benefits	1,260,000	68,000
Other Overhead (utilities, food etc)	630,000	195,200
Total budgeted costs	**4,275,000**	**388,000**

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One of Escape Lodge's famous cafés is the Marina Café with an underwater theme. The management has budgeted the variable cost per set meal as RM15 and the total budgeted fixed cost is RM7,500. They also provided the following data for Marina Café for the month of October 2021:

Type of set lunch	Budgeted (set)	Actual (set)
Burger set	600	625
Steak set	200	188
Salad set	200	213
TOTAL	**1,000**	**1,026**

Required

(a) If Escape Lodge desires a profit margin of RM5.50 per labour hour for the water sports and cave diving activities, compute the rate charged per hour of labour. (4 marks)

(b) Determine the material charges percentage if Escape Lodge desires a 16.5% profit margin on the material charges for the water sports and cave diving activities. (4 marks)

(c) In December 2021, Mr. Lee wants to bring his whole family for a vacation at Escape Lodge. He has also requested for the water sports and cave diving activities. The management had determined that the activities will require 40 labour hours and RM400 material charges. Prepare the water sports and cave diving activities quotation for Mr. Lee. (3 marks)

(d) Allocate the set meal costs to each type of set meal using the **single rate method**. Budgeted rate should be used, and the cost should be allocated based on the actual number of set meals sold. (4 marks)

(e) Allocate the set meal costs to each type of set meal using the **dual rate method**. Budgeted rates should be used. Fixed costs should be allocated using the budgeted number of set meals sold while the variable costs should be allocated using the actual number of set meals sold. (5 marks)

(Total: 20 marks)

QUESTION 3

Premier Electro Sdn. Bhd. manufactures various types of household electrical appliances under their brand name 'Electro'. The company's best sellers are the air fryer A103, sold at RM350 per unit and the microwave oven M022, sold at RM150 per unit. As the sales continue to increase, the company is considering expanding their business to Thailand and Indonesia.

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To support this company growth, the finance manager, Mr. Victor, has advised the company's management to consider adopting the activity-based costing method in allocating the company's overhead cost to their products. As such, the management has instructed Mr. Victor to provide a report on the company's two best selling products, the air fryer A103 and microwave oven M022. Mr. Victor has budgeted a total of 65,625 direct labour hours for October 2021. The following information were provided:

Premier Electro Sdn. Bhd.
Summary of allocation of estimated overhead cost for October 2021

Activities	Cost driver	Expected overhead cost (RM)	Expected quantity
Machine setup	Number of setups	33%	34,650 setups
Production	Number of machine hours	38%	249,375 hours
Packing	Number of packs	29%	50,750 packs
		100% for RM525,000	

Each air fryer A103 requires 2 setups, 8 machine hours and 4 packs. Meanwhile, each microwave oven M022 requires 1 setup, 5 machine hours and 2 packs. The details below were also provided by the production planning department:

Manufacturing costs	Air fryer A103	Microwave oven M022
Direct materials	1.2kg at RM70 per kg	1.1kg at RM45 per kg
Direct labour	3.5 hours at RM14 per hour	2 hours at RM12 per hour
Overhead cost	2.5 direct labour hours	2.2 direct labour hours

Required

(a) Compute the predetermined overhead rate using the traditional costing method where overhead costs are allocated based on direct labour hours. (2 marks)

(b) Determine the total cost for an air fryer A103 using the traditional costing method. (2.5 marks)

(c) Determine the total cost for a microwave oven M022 using the traditional costing method. (2.5 marks)

(d) Compute the expected overhead cost and the activity-based overhead rate for each activity using the activity-based costing method. (6 marks)

(e) Determine the overhead cost for an air fryer A103 using the activity-based costing method. (3.5 marks)

(f) Determine the overhead cost for a microwave oven M022 using the activity-based costing method. (3.5 marks)

(Total: 20 marks)

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QUESTION 4

Parchment Enterprise produces stationery gift sets for children. Each gift set consists of colour pencils, notebooks, and various other stationeries. Below are the expected production units and direct labour cost for the year 2022:

Year 2022	Q1	Q2	Q3	Q4
Production units	120,000	Increase 15%	Reduce 5% from Q1	Increase 10% from Q3
Direct labour cost per hour	RM5	Increase 5%	RM5	Increase 10% from Q3

Each gift set requires 0.4 direct labour hours, and it can be sold at RM10 per set. The following information was also provided by the finance department:

(i) Variable manufacturing overhead cost per direct labour hour is indirect material RM0.35 per hour and maintenance RM0.15 per hour.
(ii) Fixed manufacturing overhead cost is manager's salary RM12,000, factory utilities RM14,000 and factory machine depreciation RM28,000.

Required

(a) Prepare a quarterly direct labour budget for the year 2022. (8 marks)

(b) Prepare a quarterly manufacturing overhead budget for the year 2022. *(Hint: Show your total variable cost and total fixed cost in the table.)* (10 marks)

(c) Provide **ONE (1)** example of an operating budget and **ONE (1)** example of a financial budget. (2 marks)

(Total: 20 marks)

QUESTION 5

PART A

The Clay Place incurs RM300,000 joint cost every month to produce plain ceramic plates and cups. The products share common inputs such as silicon carbide, tungsten carbide and aluminium oxide. Every month, The Clay Place can produce 45,800 pieces of ceramic plates and 54,200 pieces of ceramic cups. Each ceramic plate can be sold at RM9 while each ceramic cup can be sold at RM5.

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Recently, The Clay Place has decided to process further the ceramic plates and cups by painting designs on them. The ceramic plates were further processed into floral ceramic plates while the ceramic cups were processed further into chevron ceramic cups. There were no gain and no loss in the production quantity. The company's accounts manager has provided the following information:

Product	Floral ceramic plates	Chevron ceramic cups
Further processing cost	RM77,540	RM103,520
Selling price after further processing	RM11.70	RM6.00
Closing inventory	10% of production units	8% of production units

Required

(a) Allocate the joint cost using the net realisable value (NRV) method. (5 marks)

(b) Assuming that the production cost per floral ceramic plate is RM6.10, compute the gross margin percentage for the floral ceramic plates using the net realisable value (NRV) method. (5 marks)

PART B

Funky Fox Sdn. Bhd. has provided the following standard costing information for their best seller, product M0202, for the year 2021:

Product M0202	Standard Cost Card (RM)
Direct materials (2 litres at RM6.20 per litre)	12.40
Direct labour (0.9 hour at RM12.50 per hour)	11.25
Manufacturing overhead (0.4 hour at RM4.30 per hour)	1.72
Total cost	**RM25.37**

During the month of September 2021, the company recorded the following details:

- 64,820 bottles of M0202 were produced.
- 140,000 litres of material were bought but only 93% of the materials were used. Total material purchased cost RM861,000.
- Total direct labour hours worked is 51,856 hours with a total cost of RM674,128.
- Actual manufacturing overhead incurred during the month is RM258,988.40.

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Required

Based on the above information, compute the following vaiances:

(a) Direct material price variance. (2 marks)

(b) Direct material quantity variance. (2 marks)

(c) Total direct labour variance. (2 marks)

(d) Direct labour quantity variance. (2 marks)

(e) Total overhead variance. (2 marks)

(Total: 20 marks)

End of Paper